

## Exhibit 1

## P011729US – US application US10/743,391

Sequence ID Numbers

Table detailing the sequences in the application identified by a Sequence ID Number.

SEQ ID NO	Sequence	Page/Figure	Description of Sequence
1	EVPGSQHII	9	Residues 51-58 of the <i>Escherichia coli</i> EtxB and <i>Vibrio cholerae</i> CtxB proteins (the $\beta$ 4- $\alpha$ 2 exposed loop). May be mutated at any site.
2	EVPGSQHII	9	Residues 51-58 of the <i>Escherichia coli</i> EtxB and <i>Vibrio cholerae</i> CtxB proteins (the $\beta$ 4- $\alpha$ 2 exposed loop). May be mutated at sites 51, 56 or 57.
3	EVPGSQHII	9	Residues 51-58 of the <i>Escherichia coli</i> EtxB and <i>Vibrio cholerae</i> CtxB proteins (the $\beta$ 4- $\alpha$ 2 exposed loop). May be mutated at sites 51, 56 or 57.
4	SIIINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
5	CSIINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
6	CEKLAGFGSIINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
7	CAVGAGATAEESINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
8	CEKLAGFGAVGAGATAAESIIINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
9	CCEKLAGFGARGAGATAAESIIINFEKL	45	Synthetic peptide used to construct EtxB conjugates.
10	CEKLAGFGAVGAGATAAESIIINFEKLTEWTS	45	Synthetic peptide used to construct EtxB conjugates.
11	AGFGAVGAGATAEE	49	Loop segment of the Pol-peptide of HSV-1

SEQ ID NO	Sequence	Page/Figure	Description of Sequence
12	TPQNITDLCA EYHNTQIHTL NDKLISYTES LAGKREMAII TFKNGATEFQV EVPGSQHIDS QKKAIERMKD TLRJAYLTEA KVEKLCVWN KTPHATAAIS MAN	Figure 1	CtxB – <i>Vibrio cholerae</i> cholera toxin B subunit protein sequence
13	TPQNITDLCA EYHNTQIHTL NDKLISYTES LAGKREMAII TFKNGATEFQV EVPGSQAIDS QKKAIERMKD TLRJAYLTEA KVEKLCVWN KTPHATAAIS MAN	Figure 1	Mutant CtxB (H57A)
14	APQITTEILCS EYRNTQIYTI XDKLISYTES MADKREMVII TFKSGETFQV EVPGSQHIDS QKKAIERMKD TLRITYLTET KIDKLCVWN KTPISIAAIS MEN	Figure 2	Mutant EtxB (G33D)
15	APQITTEILCS EYRNTQIYTI XDKLISYTES MAGKREMVII TFKSGETFQV EVPGSQHIDS QKKAIERMKD TLRITYLTET KIDKLCVWN KTPISIAAIS MEN	Figure 6	EtxB – <i>Escherichia coli</i> heat-labile enterotoxin B subunit protein sequence
16	APQITTEILCS EYRNTQIYTI XDKLISYTES MAGKREMVII TFKSGETFQV EVPGSQAIDS QKKAIERMKD TLRITYLTET KIDKLCVWN KTPISIAAIS MEN	Figure 11	Mutant EtxB (H57A)

SEQ ID NOS 4-10:

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Synthetic peptides used to construct EtxB conjugates, as listed in Table 1, page 45.

Peptide	Sequence	M <sub>w</sub>	Seq ID No
8mer	SIINFEKL	945	<b>4</b>
9mer	CSIINFEKL	1048	<b>5</b>
16mer	CEKLAGFGSIINFEKL	1751	<b>6</b>
19mer	CAVGAGATAEESIINFEKL	1905	<b>7</b>
26mer	CEKLAGFGAVGAGATAESIINFEKL	2608	<b>8</b>
26mer*	CEKLAGFGARGAGATAESIINFEKL	2665	<b>9</b>
31mer	CEKLAGFGAVGAGATAESIINFEKLTEWTS	3212	<b>10</b>

SEQ ID NO11:

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Loop segment of the Pol-peptide of HSV-1

AGFGAVGAGATAEE

SEQ ID NO12:

Figure 1

Protein sequence of *Vibrio cholerae* CtxB

TPQNITDLCA EYHNTQIHTL NDKIFSITES LAGKREMAII TFKNGATEFQV EVPGSQHIDS  
QKKAIERMKD TLRIAYLTEA KVEKLCVWNN KTPHAIAAIS MAN

SEQ ID NO13:

Mutant CtxB protein sequence (H57A)

TPQNITDLCA EYHNTQIHTL NDKIFSITES LAGKREMAII TFKNGATEFQV EVPGSQAIDS  
QKKAIERMKD TLRIAYLTEA KVEKLCVWNN KTPHAIAAIS MAN

## SEQ ID NO14:

## Mutant EtxB protein sequence (G33D)

APQTITELCS EYRNTQIYTI XDKILSYTES MADKREMVII TFKSGETFQV EVPGSQHIDS  
QKKAIERMKD TLRITYLTET KIDKLCVWNN KTPISIAAIS MEN

## SEQ ID NO15:

Protein sequence of *Escherichia coli* EtxB

APQTITELCS EYRNTQIYTI XDKILSYTES MAGKREMVII TFKSGETFQV EVPGSQHIDS  
QKKAIERMKD TLRITYLTET KIDKLCVWNN KTPISIAAIS MEN

## SEQ ID NO16:

## Mutant EtxB protein sequence (H57A)

APQTITELCS EYRNTQIYTI XDKILSYTES MAGKREMVIT TFKSGETFQV EVPGSQAIDS  
QKKAIERMKD TLRITYLTET KIDKLCVWNN KTPISIAAIS MEN